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REMARKS

In accordance with the foregoing, claim 1 has been amended to clarify the invention and claim 4 has been amended to improve form thereof. No new matter is presented and accordingly, approval and entry of the foregoing amended claims are respectfully requested.

Claims 1-5 are pending and under consideration.

Item 2: Rejection of claims 1, 4, and 5 under 35 U.S.C. 103(a) as being unpatentable over Ahmad et al. (U.S. Patent No. 5,209,817);

Item 3: Rejection of claims 2 and 3 for obviousness under 35 U.S.C. 103(a) over Ahmad et al. in view of Masahiro et al. (JP-A 2001-053075); and

Item 4: Rejection of claims 1 - 5 for obviousness under 35 U.S.C. 103(a) over Lin et al. (U.S. Pub. 2004/016659) in view of Ahmad et al.

The rejections are respectfully traversed.

According to the present invention as defined by the amended claim 1, the resist pattern is formed as to expose the portion thereof having a shape which exactly conforms with the pattern grooves of the second insulating layer. Then, the pattern grooves are filled with a conductor by electroplating using the seed layer as a power supply layer. Then, the resist pattern and also the seed layer exposed on the surface of the second insulating layer are removed, so that a wiring pattern, consisting of the conductor, remains in the patterned grooves.

Therefore, according to the present invention, as the exposed portions of the resist pattern (48) exactly conform with pattern grooves (44) of the second insulating layer (42), as shown in Fig. 1(e), a conductor pattern is not formed on the second insulating layer, as seen in Fig. 1(f). Therefore, when the seed layer (46) is removed, the etching acid will not enter the portion under the conductor pattern (52) and, thus, fine and accurate wiring patterns can be formed, as shown in Figs. 1(g) and 1(h).

Contrary to this, Ahmad et al. (see, Figs. 5 - 7 and others) discloses that the configuration of the exposed portion of the second layer of photosensitive polyimide 18 is not exactly the same as the pattern grooves. Therefore, when the seed layer (19) is removed, the etching acid may enter the portion under the conductor pattern (25, 27). Thus, Ahmad et al. does not disclose or even suggest the patentable subject matter of the present invention – indeed, Ahmad et al. is “teaching – away” from the claimed invention hereof.

Masahiro et al. discloses a wiring pattern consisting of a plurality of different metals and

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also discloses a prior art technique discussed in the specification of the present application. However, Masahiro et al. does not disclose or suggest any of the patentable subject matter of the present invention, as discussed above.

Lin et al. likewise discloses a prior art technique mentioned in the specification of the present application and, thus, is subject to the defect that, when the seed layer is removed, etching acid may enter the portion under the conductor pattern. Clearly, Lin et al. does not suggest or disclose any of the patentable subject matter of the present invention, as discussed above.

Lack of Prima Facie Demonstration of Obviousness

It is respectfully submitted that the action has not set forth the required prima facie demonstration of obviousness in support of the combinations of prior art in the rejections of Items 3 and 4 of the action under the stringent standards required to be met for establishing § 103 obviousness as set forth in MPEP 2142 – 2143.03.

Conclusion

In accordance with the foregoing, it is respectfully submitted that the pending claims patentably distinguish over the references of record, taken singularly or in any proper combination.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

Dec. 8, 2004

By:

H.J. Stagg

H.J. Stagg

Registration No. 22,010

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

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STAAS & HALSEY

By:

Rain A. Adams

Date

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